APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,236	09/26/2005	Shengyang Huang	F-8417	1828

28107 7590 12/11/2006	EXAMINER
JORDAN AND HAMBURG LLP	JACKSON, JAKIEDA R

	ART UNIT	PAPER NUMBER
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DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/511,236	HUANG ET AL.
	Examiner	Art Unit	
	Jakieda R. Jackson	2626	

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is FINAL. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-16_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-16_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _12 October 2004_ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   **Claims 1-2 and 9-10** are rejected under 35 U.S.C. 102(e) as being anticipated

by Corston-Oliver et al. (USPN 6,901,402), hereinafter referenced as Corston-Oliver.

Regarding **claims 1 and 9**, Corston-Oliver discloses a conversation control

system which retrieves based on input information received from a user, a reply

sentence to the input information, comprising:

a morpheme extracting unit (morpheme analyzer) configured to extract, based on

a character string corresponding to the input information, at least one morpheme

constituting a minimum unit of the character string, as first morpheme information (first

textual input; column 7, line 62 – column 8, line 50 with column 4, lines 59-67 and

column 19, lines 34-40);

a conversation database configured to store pieces of second morpheme

information each showing a morpheme including a character, a string of characters or a

combination thereof, and a plurality of reply sentences, which are associated with one

another (column 8, lines 16-37 with column 9,, lines 26-43);

a topic search unit (column 10, line 58 – column 11, line 12) configured to

compare, based on the first morpheme information (first textual input) extracted at the

morpheme extracting unit, the first morpheme information with the pieces of second

morpheme information, and to search a piece of second morpheme information (second

textual input) corresponding to the first morpheme information from among the pieces of

second morpheme information (column 5, lines 38-50 with column 11, lines 24-56); and

a reply retrieval unit configured to retrieve, based on the piece of second

morpheme information searched at the topic search unit, a reply sentence associated

with the piece of second morpheme information (provide documents; column 5, lines

38-50 with column 15, lines 9-24).

Regarding **claims 2 and 10**, Corston-Oliver discloses a conversation control

system further comprising:

an input type determining unit configured to determine, based on the character

string corresponding to the input information, a type of input including affirmation or

negation (good/bad match; column 16, lines 4-17); wherein,

the pieces of second morpheme information are each associated with a plurality

of reply sentences (column 5, lines 38-50 with column 9, lines 26-42);

the reply sentences are each associated with types of response (column 5, lines

38-50); and

the reply retrieval unit is configured to compare, based on the piece of second

morpheme information searched at the topic search unit, the types of response

associated with the piece of second morpheme information (second textual input) with

the determined type of input, to search a type of response corresponding to the type of

input, to search a type of response corresponding to the type of input from among the

types of response, and to retrieve a reply sentence associated with the retrieved type of

response (column 5, lines 38-50 with column 9, lines 26-42 and column 15, lines 9-24).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 3-8 and 11-16** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Corston-Oliver in view of de Hita et al. (USPN 6,411,924), hereinafter

referenced in view of de Hita.

Regarding **claims 3 and 11**, Corston-Oliver discloses a conversation control

system and method, but does not specifically teach a system and method further

comprising:

a topic identification information search unit configured to compare, based on the

first morpheme information extracted at the morpheme extracting unit, the first

morpheme information with pieces of topic identification information from among the

pieces of topic identification information; wherein,

the pieces of topic identification information are each associated with the pieces

of second morpheme information;

the pieces of second morpheme information are each associated with the reply

sentences; and

the topic search unit is configured to compare, based on the piece of topic

identification information searched at the topic identification information search unit,

pieces of second morpheme information associated with the piece of topic identification

information with the first morpheme extracting unit, and to search a piece of second

morpheme information corresponding to the first morpheme information from among the

pieces of second morpheme information.

de Hita discloses a system and method further comprising:

a topic identification information search unit (topic analyzed) configured to

compare, based on the first morpheme information extracted at the morpheme

extracting unit, the first morpheme information with pieces of topic identification

information from among the pieces of topic identification information (column 9,lines 40-

67); wherein,

the pieces of topic identification information are each associated with the pieces

of second morpheme information (morphological; column 9, lines 40-67 with column 15,

line 65 – column 16, line 25);

the pieces of second morpheme information are each associated with the reply

sentences (column 11, lines 55-67 with column 9, line 40 – column 10, line 67); and

the topic search unit is configured to compare (topic matches), based on the

piece of topic identification information searched at the topic identification information

search unit, pieces of second morpheme information associated with the piece of topic

identification information with the first morpheme (morphological) extracting unit, and to

search a piece of second morpheme information corresponding to the first morpheme

information from among the pieces of second morpheme information (column 9, line 40

– column 10, line 42 with column 15, line 65 – column 16, line 25), to allow a user to

identify documents.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Corston-Oliver system and method wherein it

further comprises a topic identification information search unit, as taught by de Hita, to

enable a user to efficiently and intuitively select, filter, or browse through a group of

selected documents based on their linguistic content (column 9, lines 40-43).

Regarding **claims 4 and 12**, Corston-Oliver discloses a conversation control

system and method, but does not specifically teach a system and method further

comprising:

a supplemental unit configured to add the piece of topic identification information

searched at the topic identification information searched at the topic identification

information search unit to the first morpheme information extracted at the morpheme

extracting unit, when no piece of second morpheme information corresponding to the

extracted first morpheme information can be searched at the topic search unit; wherein,

the topic search unit is configured to search, based on the first morpheme

information with the piece of topic identification information added at the

supplementation unit, a piece of second morpheme information corresponding to the

first morpheme information from among the pieces of second morpheme information.

de Hita discloses a system and method further comprising:

a supplemental unit configured to add the piece of topic identification information

(topic modifier) searched at the topic identification information searched at the topic

identification information search unit to the first morpheme information extracted at the

morpheme extracting unit, when no piece of second morpheme information

corresponding to the extracted first morpheme information can be searched at the topic

search unit (column 14, lines 54-66 with column 19, line58 – column 20, line 49);

wherein,

the topic search unit is configured to search, based on the first morpheme

information with the piece of topic identification information added at the

supplementation unit (added to document), a piece of second morpheme information

corresponding to the first morpheme information from among the pieces of second

morpheme information (column 20, lines 37-49), to produce a subtopic of the head topic

and to expand the number of topics displayed in the topics.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Corston-Oliver's system and method wherein it

further comprises a supplemental unit and a topic search unit, as taught by de Hita, to enable a user to efficiently and intuitively select, filter, or browse through a group of selected documents based on their linguistic content (column 9, lines 40-43).

Regarding **claims 5 and 13**, Corston-Oliver discloses the conversation control system and method, but does not specifically teach a system and method further comprising:

a ranking unit configured to perform ranking according to the frequency of search of a piece of second morpheme information at the topic search unit; wherein,

the pieces of second morpheme information are each associated with a plurality of reply sentences;

the reply sentences are each associated with priority levels to be selected as the reply sentence; and

the reply retrieval unit is configured to compare, based on the piece of second morpheme information searched at the topic search unit, the priority levels associated with the piece of second morpheme information with the rank determined at the ranking unit, to identify a priority level corresponding to the rank from among the priority levels, and to retrieve a reply sentence associated with an identified priority level.

de Hita discloses a system and method further comprising:

.   a ranking unit configured to perform ranking according to the frequency of search (frequency of occurrence) of a piece of second morpheme information at the topic search unit (column 9, lines 40-67); wherein,

the pieces of second morpheme information are each associated with a plurality

of reply sentences (column 11, lines 55-67 with column 9, line 40 – column 10, line 67);

the reply sentences are each associated with priority levels (importance) to be

selected as the reply sentence (column 9, lines 40-67); and

the reply retrieval unit is configured to compare, based on the piece of second

morpheme information searched at the topic search unit, the priority levels associated

with the piece of second morpheme information with the rank determined at the ranking

unit, to identify a priority level (importance) corresponding to the rank from among the

priority levels, and to retrieve a reply sentence associated with an identified priority level

(column 9, lines 40-66), to obtain such linguistic relevance).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Corston-Oliver's system and method wherein it

further comprises a ranking unit, as taught by de Hita, to enable a user to efficiently and

intuitively select, filter, or browse through a group of selected documents based on their

linguistic content (column 9, lines 40-43).

Regarding **claims 6 and 14**, Corston-Oliver discloses the conversation control

system and method, but does not specifically teach a system and method wherein:

the reply retrieval unit is configured to perform processing of not retrieving the

reply sentence, when the rank determined at the ranking unit is the lowest.

de Hita discloses a system and method further comprising the reply retrieval unit

is configured to perform processing of not retrieving the reply sentence, when the rank

determined at the ranking unit is the lowest (column 15, lines 10-20 with column 18,

lines 23-67 and claim 24), to obtain linguistic relevance).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Corston-Oliver's system and method wherein it

further comprises the reply retrieval unit is configured to perform processing of not

retrieving the reply sentence, when the rank determined at the ranking unit is the lowest,

as taught by de Hita, to enable a user to efficiently and intuitively select, filter, or browse

through a group of selected documents based on their linguistic content (column 9, lines

40-43).

Regarding **claims 7 and 15**, Corston-Oliver discloses a conversation control

system and method, but does not specifically teach a system and method wherein:

the pieces of topic identification information are associated with one another in

predetermined relationships as superordinate concepts or subordinate concepts; and

the topic identification information search unit is configured to compare, based on

the first morpheme information extracted at the morpheme extracting unit, the extracted

first morpheme information with pieces of topic identification information related to the

previously searched piece of topic identification information as superordinate concepts,

and to search a piece of topic identification information corresponding to the morpheme

constituting the first morpheme information from among the pieces of topic identification

information.

de Hita discloses a system and method further comprising:

the pieces of topic identification information are associated with one another in predetermined relationships as superordinate concepts or subordinate concepts (subordinate topic; column 10, lines 1-9); and

the topic identification information search unit is configured to compare (matches), based on the first morpheme information extracted at the morpheme extracting unit, the extracted first morpheme information with pieces of topic identification information related to the previously searched piece of topic identification information as superordinate concepts (superior), and to search a piece of topic identification information corresponding to the morpheme constituting the first morpheme information from among the pieces of topic identification information (column 10, lines 1-42 with column 20, lines 37-49), so that the user may efficiently and intuitively identify a topic as being a subtopic of a superior topic of a subordinate topic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Corston-Oliver's system and method wherein it further comprises predetermined relationships as superordinate or subordinate concepts, as taught by de Hita, therefore, a user may efficiently and intuitively identify topics in accordance with their importance in the selected documents and also with knowledge of the relationships among such topics (column 10, lines 1-9).

Regarding **claims 8 and 16**, Corston-Oliver discloses the conversation control system and method, but does not specifically teach wherein:

the pieces of topic identification information are associated with one another in predetermined relationships as superordinate concepts or subordinate concepts; and

when retrieving a piece of topic identification information corresponding to the

morpheme constituting the first morpheme information , the topic identification

information search unit is configured to search another piece of topic identification

information associated with a piece of topic identification information which is a

superordinate concept to the searched piece of topic identification information.

de Hita teaches a system wherein:

the pieces of topic identification information are associated with one another in

predetermined relationships as superordinate concepts or subordinate

concepts(subordinate; column 10, lines 1-9); and

when retrieving a piece of topic identification information corresponding to the

morpheme constituting the first morpheme information (morphological analysis; column

9, lines 40-59 with column 15, lines 21-35), the topic identification information search

unit is configured to search another piece of topic identification information associated

with a piece of topic identification information which is a superordinate concept to the

searched piece of topic identification information (column 10, lines 1-42 with column 20,

lines 37-49), that the user may efficiently and intuitively identify a topic as being a

subtopic of a superior topic of a subordinate topic.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Corston-Oliver's system and method wherein the

pieces of topic identification information are associated with one another in

predetermined relationships as superordinate concepts or subordinate concepts; and

when retrieving a piece of topic identification information corresponding to the

morpheme constituting the first morpheme information, the topic identification

information search unit is configured to search another piece of topic identification

information associated with a piece of topic identification information which is a

superordinate concept to the searched piece of topic identification information, as taught

by de Hita, therefore, a user may efficiently and intuitively identify topics in accordance

with their importance in the selected documents and also with knowledge of the

relationships among such topics (column 10, lines 1-9).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Jacquemin et al. (USPN 6,101,492) disclose methods and apparatus for

  information indexing and retrieval as well as query expansion using morpho-

  syntactic analysis.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jakieda R. Jackson whose telephone number is

571.272.7619. The examiner can normally be reached on Monday through Friday from

7:30 a.m. to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on 571.272.7843. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRJ
November 30, 2006

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